

REMARKS

Claims 11-25 are pending. Claims 11-25 are rejected under 35 USC 103(a) as being unpatentable over US patent 6,788,646 (Fodor et al.) in view of US patent application publication 20040100901 (Bellows). Claim 15 is rejected under 35 USC 103(a) as being unpatentable over Fodor in view of Bellows and in view of US patent 4,872,157 (Hemmady et al.).

Corrections to the section headings of the specification are made herein. Claims 26-30 are new. Claims 26, 27, and 28, recite a definition of "marginal node" per the specification paragraph 11, last 5 lines, and par. 13, lines 1-3, and elsewhere. No new matter is added. Claims 11-30 are presented for examination.

Response to rejections under 35 USC 103(a)

1. Fodor does not define marginal nodes. Applicants' definition of marginal nodes from the specification is explicitly recited in new claims 26, 27, and 28, based on the specification par. 11, last 5 lines, and par. 13, lines 1-3. A similar limitation for "marginal node" already exists in claim 11 since this term is defined in the specification. See Applicants' sole figure, in which marginal nodes are shaded, and internal nodes are not shaded. Examiner holds that Fodor's nodes 20 correspond to Applicants' marginal nodes R1-R10. However, Fodor's nodes 20 include both marginal and internal nodes, and thus do not correspond to Applicants' marginal nodes or the claimed step of identifying pairs of marginal nodes. Internal nodes do not start and end a transmission within a network, but are used to route the transmission between marginal nodes. Optimization of internal nodes and links is eliminated in the present method to reduce complexity and overhead of optimization (par. 7)

2. Fodor does not initiate the network by setting the same blocking probability for each of a plurality of pairs of marginal nodes, then increasing the threshold value step- by-step for all of the pairs of marginal nodes until an overload occurs on one or more pairs, then reducing the threshold value on the overloaded pair(s) to the value before the overload occurred. Fodor further does not repeat the above steps on the remaining non-overloaded pairs.

3. Bellows, like Fodor, does not define marginal nodes, and does not use Applicants' steps to optimize a network between all pairs of marginal nodes regardless of respective paths and intervening internal routing nodes between each pair. Examiner cites Bellows paragraph 3, which discusses a known method for marking incoming packets as green, yellow, or red, depending flow rates of traffic incoming to a router. *"The colors green, yellow or red can be sent to the next hop along with the packet to aid in the next hops decision to pass the packet along or to discard it."* Each "hop" is an internal routing node, which must make another priority and threshold decision. Internal nodes are eliminated from consideration in the present invention for reasons noted above.

4. Hemmady does not address the deficiencies of Fodor and Bellows. Hemmady's FIG 2 cited by Examiner shows a circuit-switched network (abstract and throughout) in a star topology controlled by a central hub. Hemmady's col. 3 lines 3-4: *"In one embodiment, the circuit switch is a space division switch."* This architecture with central control does not apply to Applicants' invention, which applies to "connectionless" networks (i.e. not circuit-switched), such as packet-switched, and especially to Internet Protocol networks.

Applicants' par. 10: "In accordance with the invention limit values are defined for limiting traffic in a communication network (e.g. an IP network). For data transmission over the communication network there is provision for access control to be undertaken for at least a part of the traffic to be transmitted—e.g. for one or more classes of service before resources of the network are used for transmission. Access is controlled in this case at marginal nodes of the communication network formed by nodes and links. A marginal node in this case can be a network access node (also known as an ingress node) or a network output node (also known as an egress node), as well as an end or start node of a data transmission located in the communication network, i.e. a node of the network which represents a source or sink as regards the traffic. In the latter case the term "marginal" in the word marginal node does not refer to the network but to the transmission path of data packets."

In any case, Hemmady does not teach Applicant's optimization steps that are missing from Fodor and Bellows as argued above. Furthermore the combination is not motivated, since Fodor and Bellows do not apply to circuit-switched networks.

Conclusion

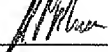
M.P.E.P. 2143.04 provides that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered for judging the patentability of the claim against the prior art. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. Bellows and Hemmady do not address the distinctions argued above for Fodor. Thus, the proposed combinations of Fodor, Bellows, and Hemmady do not provide a prima facie case for the obviousness rejections of the claimed invention.

For obviousness to occur under 35 USC 103, a combination must be suggested by the references or motivated by obvious or expected benefits in view of documented knowledge in the field at the time of the invention, not by hindsight guided by the Applicants' invention. It should not be contrary to the teachings of the references, it must work, and it must produce Applicants' invention. These criteria are not met as argued above. Fodor lacks elements and steps of Applicants' invention that are not addressed by Bellows or Hemmady, and there is no benefit in combining Hemmady with Fodor and/or Bellows. Therefore Applicants feel this application is in condition for allowance, which is respectfully requested.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including the fees specified in 37 C.F.R. §§ 1.16 (c), 1.17(a)(1) and 1.20(d), or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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